

1,2,4-BENZOTRIAZINE OXIDES AS
RADIOSENSITIZERS AND SELECTIVE CYTOTOXIC AGENTS

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Abstract

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A method of using 1,2,4-benzotriazine oxides, some of which are novel compounds, as radiosensitizers and selective cytotoxic agents is disclosed. These compounds are shown to specifically radiosensitize hypoxic tumor cells. Some are additionally disclosed to be useful as specific cytotoxic agents for these cells. They also show an unexpected ability to radiosensitize aerobic cells following or preceding a hypoxic incubation of the cells with the drug. This provides a basis for selective radiosensitization of tumors compared to normal cells. A novel method for preparing the 1,2,4- benzotriazine oxides is also disclosed.